

# EXHIBIT B

CONFIDENTIAL - ATTORNEYS' EYES - AVI RUBIN

UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE

IOENGINE, LLC,

Plaintiff/Counterclaim

Defendant

vs.

Case No. 18-452-WCB

PAYPAL HOLDINGS, INC.,

Defendant/Counterclaim

Plaintiff.

January 18, 2022

9:28 a.m. - 5:54 p.m.

Bonita Springs, Florida

\*\* CONFIDENTIAL - ATTORNEY'S EYES ONLY - SOURCE CODE \*\*

REMOTE VIDEOTAPE DEPOSITION OF

AVIEL DAVID RUBIN

Taken on behalf of the Defendant/Counterclaim

Plaintiff before Michael J. D'Amato, RMR, Notary Public

in and for the State of Florida at Large, pursuant to

Notice of Taking Deposition in the above cause.

Job # 205077

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REMOTE APPEARANCES

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DECHERT

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BY: JARED BOBROW, ESQ.

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KERRY TIMBERS, ESQ.

ALSO PRESENT: PHILIP RIZZUTI, Videographer, TSG

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2 THE VIDEOGRAPHER: Good morning, counsel. My  
3 name is Phil Rizzuti. I am a legal videographer in  
4 association with TSG Reporting Inc. Due to the  
5 severity of the COVID 19 and following the practice  
6 of social distancing, I will not be in the same  
7 room with the witness. Instead, I will record this  
8 videotape deposition remotely. The reporter,  
9 Michael D'Amato, also will not be in the same room  
10 and will swear the witness remotely.

11 Do all parties stipulate to the validity of  
12 this video recording and remote swearing and that  
13 it will be admissible in the courtroom as if it had  
14 been taken following Rule 30 of the Federal Rules  
15 of Civil Procedure and the state's rules where this  
16 case is pending?

17 MR. BOBROW: This is Jared Bobrow for PayPal.  
18 Yes, we stipulate.

19 MR. CHUEBON: This is Greg Chuebon for  
20 Ioengine, and yes, we do so stipulate for the  
21 Ioengine V PayPal matter.

22 THE VIDEOGRAPHER: Thank you. This is the  
23 start of media labeled No. 1 of the video recorded  
24 deposition of Dr. Avi Rubin in the matter of  
25 Ioengine LLC v. PayPal Holdings, Inc. in the United

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2 Q. You'd also agree that all of the claims  
3 require a terminal, right?

4 A. Yes.

5 Q. And all of the claims require a communication  
6 network node, correct?

7 A. Yes, that is my recollection, yes.

8 Q. One of the claims requires a communication  
9 network node database, I believe that's the claim we  
10 were looking at earlier, Claim 10 of the '969 patent.  
11 In the context of the patents-in-suit what does a  
12 database mean in that context?

13 A. I would say it's the plain and ordinary  
14 meaning of database.

15 Q. And what is that plain and ordinary meaning in  
16 your opinion?

17 A. I would say it's data with some structure that  
18 has the ability to be queried and searched and other  
19 similar functions applied to it.

20 Q. I heard "queried and searched" and then other  
21 similar functions. What other similar functions do you  
22 have in mind beside querying and searching data that's  
23 on the database?

24 A. Well, you can add, insert into the database,  
25 you can remove things from the database. I guess those

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2 would be -- you can update a field in a record on a  
3 database.

4 Q. So for the '969 patent and the database that's  
5 claimed therein the database needs to be something that  
6 can be queried, can be searched, can be added to in  
7 terms of data, can be deleted to in terms of data and  
8 for which records and fields can be updated, is that  
9 right?

10 MR. CHUEBON: Objection to form.

11 A. It's saying that the data is structured in a  
12 way that enables those operations.

13 Q. And back in 2001 I take it the database is of  
14 the type that you described as very common?

15 MR. CHUEBON: Objection to form.

16 A. So relational databases were common and they  
17 had that format in 2001.

18 Q. Oracle, for example was a company that  
19 commercially sold databases, relational databases that  
20 had the functions that you described, correct?

21 MR. CHUEBON: Objection to form.

22 A. They did.

23 Q. And there were other companies, probably  
24 Sybase or others, back in the 2001 time frame that also  
25 provided relational databases of the type that you



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2 described, correct?

3 MR. CHUEBON: Objection to form.

4 A. I haven't looked at Sybase but in general  
5 those types of databases were common.

6 Q. Mr. McNulty didn't invent a new database, did  
7 he?

8 MR. CHUEBON: Objection to form.

9 A. He did not invent a new database technology.  
10 He did invent a way in which data can be synchronized  
11 to a database following the elements of the claim.

12 Q. Just in terms of the database itself, that's  
13 not something that he invented, correct?

14 MR. CHUEBON: Objection to form.

15 A. Databases existed before 2001.

16 Q. Now, with respect to the asserted claims you  
17 would agree with me that none of the asserted claims  
18 require that any of the claimed communications be  
19 encrypted, correct?

20 A. Can we look at a specific claim? I don't like  
21 to answer something about all of them together.

22 Q. Well let me ask, without looking at them, you  
23 can't answer the question of whether they do or don't  
24 require encryption?

25 MR. CHUEBON: Objection to form.

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2 Q. Were you, have you heard of a standard called  
3 DUKPT?

4 A. Yes.

5 Q. Were you involved in the development of the  
6 DUKPT standard?

7 A. I was not.

8 Q. Are you familiar with the DUKPT standard?

9 A. Yes.

10 Q. That's a standard for encryption, is that  
11 right?

12 A. It's -- yes, it's a standard for key  
13 management and encryption in order to prevent reuse of  
14 keys when transactions are encrypted.

15 Q. And the DUKPT standard had been developed and  
16 published prior to 2001, is that right?

17 MR. CHUEBON: Objection to form.

18 A. I believe there have been multiple versions  
19 and I'm not clear on what the dates are.

20 Q. Was the first version of the standard, to your  
21 knowledge, the DUKPT, available prior to 2001?

22 MR. CHUEBON: Objection to form.

23 A. I'm going to look in my report. I'm going to  
24 page 12 of my report. I don't know the dates and it's  
25 not -- I don't see it in my report so I would need to

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2 look that up.

3 Q. At all events, prior to 2001 there were  
4 various encryption standards that had been developed  
5 and adopted in commercial use, is that right?

6 MR. CHUEBON: Objection to form.

7 A. You're talking about encryption standards for  
8 financial transactions?

9 Q. For any transaction, when a communication --

10 MR. CHUEBON: Objection.

11 Q. Any communication between computers?

12 MR. CHUEBON: Objection to form.

13 A. So you are asking me if prior to 2001 there  
14 were encryption standards for communications?

15 Q. Correct.

16 MR. CHUEBON: Objection to form.

17 Q. I'm sorry. Our connection isn't that great  
18 right now. Did you say yes?

19 A. Sorry. I said yes.

20 Q. What encryption standards for communications  
21 were you familiar with that predated 2001?

22 MR. CHUEBON: Objection to form.

23 A. Well, there was SSL and IPSEC, for example.

24 Q. Any others that you were familiar with prior  
25 to 2001?

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2 A. I'm sure there were, there were many that I'm  
3 familiar with. Let's see. The SSH protocol.

4 THE VIDEOGRAPHER: This is the videographer.  
5 It looks like the witness might have froze.

6 MR. BOBROW: I think that's right.

7 THE VIDEOGRAPHER: Do you want to go off the  
8 record, sir?

9 MR. CHUEBON: Dr. Rubin, can you hear us?

10 MR. BOBROW: His computer is frozen.

11 THE VIDEOGRAPHER: Let me go off. The time is  
12 3:41 p.m. and we're going off the record.

13 (Pause in the proceedings)

14 THE VIDEOGRAPHER: The time is 3:44 p.m. and  
15 we are back on the record.

16 BY MR. BOBROW:

17 Q. All right. Dr. Rubin, it seems we had some  
18 network connectivity issues and so let's go back then  
19 to the question I had asked you immediately before we  
20 had the brief pause.

21 I had asked you the question of whether there  
22 were other encryption standards that you were familiar  
23 with before 2001 besides SSL and IPSEC and in your  
24 response you mentioned the SSH protocol. Are there any  
25 other encryption standards that predate 2001 that you

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2 are aware of?

3 A. Yes, I believe that there are. I probably  
4 need to look at my lecture notes for my classes to kind  
5 of recall them right away, but I think there were  
6 various conferencing protocols, like H323 that had  
7 encryption capabilities. And so no other specific ones  
8 are jumping into my head right now, but SSL and IPSEC  
9 were the primary ones.

10 Q. And SSL and IPSEC were in common use prior to  
11 2001, weren't they?

12 MR. CHUEBON: Objection to form.

13 A. Well, they were used for different purposes.  
14 So IPSEC was used for things like corporate virtual  
15 private networks or someone on a laptop remote. I  
16 wouldn't say it was commonly used by most people. It  
17 was used by kind of techies most often.

18 SSL is a protocol for securing web  
19 communications, and so that one is more common.

20 Q. And that one was more common prior to 2001,  
21 correct?

22 A. It was more common than IPSEC.

23 Q. And back before 2001 did the basic Windows  
24 operating systems support SSL as well as IPSEC?

25 MR. CHUEBON: Objection to form.

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CERTIFICATE OF OATH

STATE OF FLORIDA )

SS

COUNTY OF PALM BEACH )

I, Michael J. D'Amato, Notary Public for the  
State of Florida, certify that on the 18th day of  
January 2022, AVIEL DAVID RUBIN personally appeared  
before me and was duly sworn or affirmed.

WITNESS my hand and official seal this 25th day  
of January 2022.



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Michael J. D'Amato  
Notary Public - State of Florida  
My Commission # GG 960978  
Expires: June 13, 2024



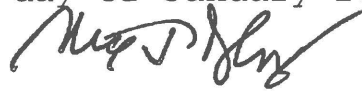
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CERTIFICATE OF COURT REPORTER

I, MICHAEL J. D'AMATO, a Registered Merit Reporter and Notary Public in and for the State of Florida at Large, do HEREBY CERTIFY that I was authorized to and did stenographically report the deposition of AVIEL DAVID RUBIN; that a review of the transcript was requested; and that the foregoing transcript, pages from 1 to 216, is a true and accurate record of my stenographic notes.

I FURTHER CERTIFY that I am not a relative, employee, attorney, or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorney or counsel connected with the action, nor am I financially interested in the action.

Dated this 25th day of January 2022.



MICHAEL J. D'AMATO,

Registered Merit Reporter